

No 102

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## An 330 Market

useful as a practical Essay in favour of Smelting  
to cure Salivation - My Doctor part may, or  
not, be correct - *Inaugural Essay*

on

## Mercurial Salivation

Paper March 7. 1828  
for

the degree of Doctor of Medicine  
in the University of Pennsylvania

By Theophilus Meade of Virginia

Philada Novb. 15<sup>th</sup> 1827.

"De hoc multi multa,  
omnis aliquid, nemo sati, -



## On Mercurial Salivation.

Mercury as a valuable medicinal article is so universally known and admitted that it would be superfluous in an essay like the one I am now entering upon to treat of its virtues. But notwithstanding the acknowledged fact of its highly medicinal efficacy, it is known to be such a powerful agent as to induce occasionally very bad effects in the system. Of these effects generally it is not my purpose to treat, as my wish is to confine myself chiefly to that diseased effect of the mind commonly called salivation.—

Mercurial salivation may be defined that morbid increased secretion of saliva with soreness and ulceration of the gums, mouth and throat, produced by mercury.—



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The disease occurs in all constitutions and may take place in a very short time after the commencement of the use of the mercury, or it may not show itself for several days or weeks. Dr James Hamilton relates a case of salivation which did not appear until the expiration of four years after the use of the blue pill for a fortnight. The gums in this case were but slightly touched during the exhibition of the pill and it was not until the end of the time mentioned that a violent salivation ensued. - No mercury had been given in the interval and the patient enjoyed for the time good health.

Generally the disease appears during or a very short time after the exhibition of the mercury and after a perfect cure, never appears again until fresh mercury has been given. But after very violent cases of the disease, it is apt to return on exposure to bad weather if

The year has commenced in a most favorable  
manner. We have had very little  
cold weather & a great deal of rain.  
which will be beneficial to our crops.  
The weather has been very  
warm & dry for the last week.  
The ground about Wethersfield  
is covered with snow. This will be  
very welcome news to our  
farmers. The snow has  
been very light & has  
not covered the ground  
as far as we expected.  
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care be not taken to cure it radically before permitting the patient to resume his former habits of life. I know myself, a young lady who was violently salivated during the spring of 1826 and apparently recovered perfectly, but on much exposure to a cold and damp atmosphere she becomes troubled with a slight return of the disease.—

The disease of the mercury is supposed to remain dormant in the system in such cases until called into play by some of its exciting causes.

Mercurial salivation does not always depend upon the quantity of the mercury exhibited, for very small quantities sometimes induce the disease as speedily as large ones. This is owing to some peculiarity of the patient's constitution. Some constitutions can bear enormous quantities of mercury without suffering in the least from its morbid influence, while others suffer very much



from the slightest <sup>alarm</sup> noise. —

Exciting Causes.—The causes tending to excite or to aggravate mercurial salivation after its excitation are exposure to cold and moisture, the use of spirituous liquors and stimulating articles of diet. A full habit also by keeping up the inflammatory diathesis aggravates it in a great degree. —

Symptoms.—At whatever period the disease takes place after the use of mercury, it discovers itself by a slight dryness and heat about the mouth, a bony taste and ten-derness of the gums. An increased secretion of saliva soon follows and the breath becomes fetid. In some cases the face swells enormously, the mouth and throat take an violent inflammation and ulceration, the tongue enlarges and protrudes beyond the teeth, the gums ulcerate, bleed profusely and slough, and the inside of



the cheeks and lips sometimes put on a deep cherry red colour in spots which rapidly proceed to gangrene. The pulse is quick and irritable and the patient extremely restless. The inflammation about the mouth and throat is often extremely painful and annoying even before the commencement of the ulcerative process.—

D<sup>r</sup> Richard Field formerly of Petersburg, Virginia and perhaps well known by some of the professors of this Institution, has been in the habit of late, of distinguishing four species of mercurial inflammation.—

In the first a general inflammatory action takes place giving the mouth, tongue, throat and the insides of the cheeks and lips a deep red colour.

In the second an aphthous crust appears on the fauces, the

for a very number of us do not  
at all like to do so when we are  
carrying a large cargo to sea.  
After getting rid of the old  
towels we have the rest returned  
in good condition for another  
month. So far we have had

nothing to do but wash the  
clothes & wash the ship. We have  
had a excellent day's work &  
very good washing of the clothes.  
I have been down to the dock to  
see about getting some more  
clothes & wash them. I have  
done all the work except those I  
have to do myself. I have  
done all the work except those I  
have to do myself.

The only time we have had

uvula and sides of the tongue.

The third species

occurs in worn out constitutions. The mouth takes on a general inflammation and an ulcer resembling in colour the inside of the mouth of a fish seizes on the angles of the jaw and spreads to the adjoining parts.

In the fourth and last species a black speck about the size of a pea is first seen between the under lip and gums which soon sloughs off.—

D<sup>r</sup> Feild met with a case of this last description in a boy about ten years of age, from a single dose of Calomel. After the slough took place gangrene commenced through out the gums in the fore part of the mouth and the inside of the under lip soon began to put on appearances of the same condition. It would be well to

... d'apres ce que l'on voit dans divers  
ouvrages de la philosophie  
deux sortes de causes qui doivent etre au  
moins deux sortes de causes qui peuvent exister  
entre elles de deux manieres soit par la cause  
et l'effet soit par la cause et l'effet de la cause  
et l'effet de l'effet. Deux sortes de causes  
qui sont de deux manieres soit par la cause  
et l'effet soit par la cause et l'effet de la cause  
et l'effet de l'effet. Deux sortes de causes  
qui sont de deux manieres soit par la cause  
et l'effet soit par la cause et l'effet de la cause  
et l'effet de l'effet.

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mention have that this case was effectually cured by one or two emetics assisted by mild astringent washes for the mouth. -

The different species of inflammation mentioned above, never require a different treatment, but may be managed by one and the same method. -

Diagnosis.— A mercurial ulcerated throat has been mistaken for the ulcer of the cynanche tonsillaris and treated accordingly.— The patient had taken calomel previous to the call of the physician and the family with which he lived being fearful of having done wrong in giving him the medicine concealed the fact until the physician discovered from the mucous fetor that mercury had been given him. The peculiar fetor therefore which results from the action



of mercury in the mouth and throat will serve as a good characteristic mark of the mercurial affections of these parts. It is also possible to mistake a mercurial ulcer in the throat for a syphilitic one. These two ulcers however may be distinguished by the mark just mentioned and the history of the case. —

Treatment. — The chief part of the treatment I would recommend in inordinate salivation, consists in the exhibition of emetics. This practice was accidentally discovered by Dr R. Field to whom I have before referred. He had a patient labouring under hemorrhage from the bowels brought on by the excessive action of calomel, to whom he gave combinations of Sassafras, Opium and sugar of lead for the purpose of stopping it. The medicine was urged to such



an extent as to vomit the patient whence-  
-ever was very irritable and who at the time  
was violently salivated. The Doctor observed  
a great change for the better in the condition  
of the mouth very soon after the effect of  
puking, and believing that it was owing to  
the emetic, he determined to give the medi-  
cine a fair trial as soon as circumstances  
would permit.—

Having a very extensive range  
of practice he soon met with a number of  
opportunities to try the virtue of emetics under  
such circumstances, which he did to the full  
confirmation of his belief.—

Many other highly  
respectable practitioners of Virginia, after nu-  
merous trials with emetics in severe cases of  
salivation, speak now so warmly in their  
favour that their use has become almost



universal in the south-eastern section of the state. -

D<sup>r</sup>. Field being called to a patient labouring under a severe salivation, directs an emetic to be given and the stomach to be washed out with Camomile tea. The evening is his favourite time for exhibiting the emetic, which generally procures the patient a comfortable night's rest. In cases of great emergency he directs as many as three emetics during the day which however knew to fail arresting the salivation if they succeeded in putting the patient. -

From the great success he has uniformly met with from emetics in violent salivations, D<sup>r</sup>. Field thinks they never would fail if timely resorted to and pushed far enough. They arrest the hemorrhage which sometimes proceeds from



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the mouth, cheek gangrene, reduce the swelling of the face and tongue, lessen the inflammation of the affected parts and allay general irritability in such a manner as to procure ease and quiet for the patient.-

The following case which was furnished me by Dr. John Field another eminent practitioner of Virginia and a graduate of this University, will show very obviously the advantages of emetics in these cases.- "I directed ten grains of calomel to be given at bed time two nights in succession, to be purged off each succeeding morning actively with salts and magnesia. The calomel was exhibited as above directed, but the friends of the patient omitted giving the salts and magnesia. There was no operation from the two doses of calomel for three days. The



Third day I was called to the patient - the face  
and head were swollen to an enormous size, so  
as scarcely to discover the nose and eyes - the  
inside of the lips and gums was of a dark  
red colour - there was an oozing of blood  
from the mouth and what little I could  
see of the tongue was black. The mouth  
was very painful and offensive and degu-  
stion very difficult. I apprehended the patient  
would die from mortification speedily if  
the usual treatment to arrest the salivation  
was observed. - I had heard of the use of  
emetics in such cases by Dr. R. Heil of Plum-  
burg. I therefore ordered 2 grs. of Tart. An-  
=time: and 25 grs. of Specac; which was taken  
with great difficulty. In the course of a short  
time it operated five or six times copiously,  
discharging each time a large quantity of  
thick tough phlegm. The stomach was



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washed out with camomile tea. After the operation of the emetic I ordered the bowels to be opened that evening with salts. The next day I visited the patient. She was very much relieved - swelling much reduced - appearance of the mouth improved - not much fetor and swallowing performed with more ease. I ordered the emetic to be repeated, to be followed by a dose of salts; and astringent washes for the mouth in a short time completed the cure.

In some cases of salivation a bullet like tumour may be observed in one of the cheeks very much inflamed and apt to run very quickly into mortification. Dr. Strachan of Petersburg thinks that emetics are of no avail in such cases. But Dr. Field during the last summer had a patient with this bullet-like tumour



whom he cured with emetics very effectually.—

D<sup>r</sup>. Finley of Ohio has lately recommended nauseating doses of emetics for salvation, but the practitioners of the south are decidedly in favour of purging.—

Besides purging, the patient his bowels should be kept soluble with salts or castor oil, which should be given in the morning on an empty stomach. His mouth should be carefully cleansed three or four times a day with some mild astringent wash, such as an infusion of rose leaves or of sage, sweetened with honey, to which a little borax may be added.—

The *Capsicum annuum* used as a gargle, is an article of high standing in the south for mercurial affections of the mouth.

And if you like this record make  
it up in full detail  
and we will endeavor to have it  
in consideration. We will give you  
a copy of our records on that all  
and the date of the finding should  
be the day when they were made  
in case of any further difficulty  
in determining them as to which all  
they made. When we receive them  
we will examine them and if satisfied  
as to their correctness we will give  
you a copy of our records on  
the date of your record. Will you do this  
as soon as you have made your record?  
When we receive your record we will  
make it up and add it to our records.

and throat. It acts I suppose on the principle of a blister in relieving local inflammation.—

Besides the local remedies mentioned, several others are sometimes used, among which may be enumerated the infusion of bark or of gall, lime water, sugar of lead and the diluted mineral acids.—

Opium is sometimes given to relieve pain and to check the discharge.—

But of all the remedies used for incoordinate salivation, enemas, in the southern part of Virginia, occupy by far the highest rank. In the course of a conversation with Dr. Field on the great advantages to be derived from them, he mentioned that he had seen several cases of violent

et non sufficit deinde  
tunc quidam ut dicit a propositum  
quoniam sed etiam  
multorum ex multis diversis sententiis  
deinceps de eis dicit quoniam  
propositus deinde dicit quoniam in illis  
deinceps deinde dicit quoniam in illis  
admodum ruris quoniam in illis  
admodum ruris quoniam in illis

salivation terminate fatally previous to the use of emetics in their cure, which he firmly believed, might have been effectually remedied by them. To this belief he was led by having since seen several cases successfully treated with emetics under precisely similar circumstances. —

On what principle emetics act in relieving mercurial salivation has never been so far as my information goes, exactly explained. It is not my purpose to attempt a positive explanation of their modus operandi in these cases, but as all suggestions in medical science are considered of some importance, I will make one or two on this part of my subject, with the hope, that if they prove lame and defective, they may be considered as suggestions only. —



It is well known that the stomach sympathises with nearly the whole system. That there is a very great sympathy between it, the mouth, fauces and salivary glands, seems to be evident from the fact of a nauseating dose of an emetic when taken into the stomach, increasing the discharge of saliva and relaxing the vessels of the mouth. In this case the stomach is primarily operated on by the nauseating dose and the mouth, fauces and salivary glands are affected secondarily through the medium of sympathy. A full dose of an emetic would have the same effect but in a greater degree. Another fact also which tends to prove the sympathetic connection between the stomach and the parts mentioned is, that a vomiting may be excited by tickling the internal fauces with a feather, or



by rubbing Tartar emetic on them and the root of the tongue. When we consider too, that the mucous coat of the stomach is a continuation of that which lines the mouth, pharynx and oesophagus, it becomes a matter of no surprise whatever that there should be such a great sympathy between these parts.—

Now in cases of mercurial salivation, I suppose that the mercury makes its peculiar impression first upon the stomach and afterwards through the medium of sympathy, the mouth, fauces &c soon or later receive this peculiar mercurial impression which becomes modified by the difference in the structure and office of the parts. Such a supposition I think may be reasonably made when mercury is internally exhibited.



In cases of salivation from the external application of mercury, the stomach (even if it is not first affected) from its great sympathy with the mouth, fauces and salivary glands, may take on a condition, similar to the one it receives when mercury is internally given, which serves to hush up the irritation in the mouth, fauces and other parts. That the stomach does become affected under such circumstances, is countenanced by the facts of the irritable state of that organ and the great loss of appetite sustained in severe cases of the mercurial disease brought on by repeated mercurial fictions. In the slighter cases however the stomach is not so obviously affected, but may take on a latent morbid condition dependent upon mercury and calculated in some



seems to keep up its morbid irritation in the mouth. The stomach being we may say the seat of life itself, possesses great conservative powers, and hence its apparent little participation in the slighter forms of the mercurial disease.—

The stomach then I suppose to be intimately concerned in inordinate salivations, and that it takes on a latent morbid condition which serves to keep up the irritation in the mouth and throat. This condition I suppose to be altered by the operation of an emetic and one of a healthy nature supervenes, which through the medium of sympathy is extended to the mouth and throat. Hence we in some measure account for the healing disposition that the ulcers in these parts assume after the



operation of emetics.

But I would not confine the curative action of emetics in salivation, to the alteration of the condition of the stomach alone. We know they have a great effect in equalizing the circulation and promoting absorption. In salivation the mouth, the fauces or the salivary glands are very much inflamed, sometimes extremely painful and their vessels much congested. There is a determination of blood to the affected parts in all local inflammations, giving rise to congestion, swelling and their consequences. Now after the operation of the emetic in cases of salivation, the circulation becoming more equalized, the determination of blood to the affected parts is not so great as before, which is a circumstance strongly favouring the cure of all local inflam-

the first time I have had  
so much time to sit down &  
think & talk with you. I have  
done nothing but pleasure myself  
since the arrival of the family  
leaving only now to go back  
and help them get ready for  
the wedding. I am still at home  
but we are all well & the  
children are well & happy. We  
are going to have a good  
wedding & the bridegroom is  
going to be a good man &  
I hope he will be a good  
husband & a good father.

-mations.

Absorption also is promoted by the emetic and the congested vessels becoming in this way disengaged, leave the parts <sup>of</sup> swollen and painful.

Perhaps the acid mercurial saliva which it is possible for the patient to swallow during imperfect sleep, may serve in some degree to keep up the local irritation, and emetics by emptying the stomach of this may therefore assist the cure. —

I have now finished what I had to say on mercurial Salivation, and although I am confident of not having done that justice to the subject which its importance demands, I hope to meet with the indulgence of those to whom seemingly I carelessly though diffidently sub-

and the people were gathered  
and they began to sing and dance  
and the people were all in great  
joy and happiness. They were all  
very happy.

and they began to sing and dance  
and they were all in great joy and  
happiness. They were all  
very happy.

and they began to sing and dance  
and they were all in great joy and  
happiness. They were all  
very happy.

-mit this day. The productions of a comparatively undisciplined mind, can not but appear trifling when viewed through the medium of talents, deep research and philosophical study. Thus, mine must appear when viewed by the Professors of the Pennsylvania University.—

is for introducing all sorts of the  
new plants introduced before me  
which were added without the  
old plants for making the species  
all more distinguishable from themselves  
the old names which are kept being given  
and introduced with the new ones